

UNITED STATES PATENT AND TRADEMARK OFFICE





UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---------------|----------------------|-------------------------|------------------|
| 09/817,567 | 03/26/2001 | Kumar Subramanian | Kum13Sil.Lan | 9915 |
| 75 | 90 12/01/2003 | | EXAMINER | |
| PENNIE AND EDMONDS 1155 AVENUE OF THE AMERICAS | | | DAVIS, DANIEL J | |
| NEW YORK, NY 10036-2711 | | | ART UNIT | PAPER NUMBER |
| | | | 3731 | |
| | | | DATE MAILED: 12/01/2003 | |
| | | | | 20 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Applicati - No | A STATE OF THE STA | | | |
|---|--|---|--|--|--|--|
| Office Action Summary | | Applicati n No. | Applicant(s) | | | |
| | | 09/817,567 | SUBRAMANIAN ET AL. | | | |
| | | Examiner | Art Unit | | | |
| | | D. Jacob Davis | 3731 | | | |
| Period fo | The MAILING DATE of this communication ap or Reply | pears on the cover she it with the | e correspondence address | | | |
| THE I - External after - If the - If NO - Failu - Any r | ORTENED STATUTORY PERIOD FOR REPI MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a rejudition of the provision of the provision of the maximum statutory period the provision of the | 136(a). In no event, however, may a reply be ply within the statutory minimum of thirty (30) of will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDO | timely filed days will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133). | | | |
| 1)🖾 | Responsive to communication(s) filed on <u>08</u> | September 2003. | | | | |
| 2a)[| This action is FINAL . 2b)⊠ This | s action is non-final. | | | | |
| 3)□ | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Dispositi | ion of Claims | | | | | |
| 5)□ 6)⊠ 7)□ | Claim(s) <u>24-41</u> is/are pending in the applicatida) Of the above claim(s) is/are withdraclaim(s) is/are allowed. Claim(s) <u>24-41</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/ | awn from consideration. | | | | |
| , | ion Papers | · | | | | |
| 10) | The specification is objected to by the Examination The drawing(s) filed on is/are: a) acceptance and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examination is objected to by the Examination is objected. | ccepted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is | See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d). | | | |
| Priority (| under 35 U.S.C. §§ 119 and 120 | | | | | |
| a) 13) | Acknowledgment is made of a claim for foreignal All b) Some * c) None of: 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority application from the International Bures See the attached detailed Office action for a list Acknowledgment is made of a claim for domestince a specific reference was included in the first sentence of the certified copies of the priority document is made of a claim for domestince as pecific reference was included in the first sentence of the certified copies of the priority document is made of a claim for domesting the certified copies of the priority document is made of a claim for domesting the certified copies of the priority document is made of a claim for domesting the certified copies of the priority document is made of a claim for domesting the certified copies of the priority document is made of a claim for domesting the certified copies of the priority document is made of a claim for domesting the certified copies of the priority document is made of a claim for domesting the certified copies of the priority document is made of a claim for domesting the certified copies of the priority document is made of a claim for domesting the certified copies of the priority document is made of a claim for domesting the certified copies of the priority document is made of a claim for document is made of a claim | nts have been received. Ints have been received in Application on the control of the certified copies not received the certified copies not received priority under 35 U.S.C. § 11 irst sentence of the specification rovisional application has been restic priority under 35 U.S.C. §§ 1. | ation No ived in this National Stage ived. 9(e) (to a provisional application) or in an Application Data Sheet. received. 20 and/or 121 since a specific | | | |
| Attachmen | | | | | | |
| 2) Notic | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) 🔲 Notice of Informa | ary (PTO-413) Paper No(s) al Patent Application (PTO-152) | | | |

Art Unit: 3731

DETAILED ACTION

Response to Amendment

The Declaration filed on 9/8/03 under 37 CFR 1.131 has been considered but is ineffective to overcome the Gertstein et al. reference. The Declaration was not signed as required to overcome the reference.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 24-26 and 30-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Pisano et al. (US 5,928,207). Pisano discloses a microlancet device 20 for obtaining blood samples comprising an elongated single crystal silicon substrate having a base portion 24 and a penetration portion 22 and 40. The penetration portion has a sharp point 40. The width and thickness of the penetration portion narrow to become a sharp point.

Application/Control Number: 09/817,567

Art Unit: 3731

Page 3

The penetration portion of the device has a width cross-section of less than 700 and even less 300 micrometers, and a thickness less than 300 and even less than 150 micrometers (Col. 5, lines 5-11). As illustrated, the cross-section of the penetration end forms a sharp point. Also, the patent states that the device extends from a near infinitesimally small point to the maximum width and thickness dimensions. Hence, the penetration portion must at some point have a cross-section of about 50 micrometers in width and thickness, excluding the sharp point. As a result, the penetration portion extends from about 250 to about 50 micrometers in thickness and in width. The lancet is inherently disposable.

Claims 24, 25, 30-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Gartstein et al. (US 6,379,324). Illustrated in Fig. 21 (Figs. 18-21 illustrate the needle formation process), Gartstein disclose a microlancet device comprising an elongated single crystal silicon substrate 410 (Col. 14, lines 53-et seq.) having a base end 410 A,B, and a penetration end, which is the pointed portion of the lancet. They describe using chamber 470 to dispense medicine. However, it may also be used to receive a blood sample. Illustrated are cylindrically shaped needles, but tapered needles are also anticipated (Col. 17, lines 1-6). Tapered needles inherently have a chiseled shape. The device is inherently disposable.

Claim R jections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 27-29 and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pisano et al. in view of Lin et al. (US 5,591,139). Pisano is silent regarding the length of the penetration portion. Nevertheless, Lin teaches a microlancet device for taking a blood sample wherein the needle is between about 1 and 6 millimeters (Col. 4, lines 11-14) to pierce the outer tissue. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make Pisano's needle between about 1 and 6 millimeters as taught by Lin, in order to pierce the outer tissue and obtain a blood sample.

Pisano fails to disclose a silicon nitride layer of about 2000 angstroms thick.

Nevertheless, Lin teaches in Fig. 3N-2 a silicon nitride film 64 used to cover the electrical contacts (Col. 5, lines 34-37). Pisano also discloses the use of electrical contacts. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a silicon nitride film of about 2000 angstroms to cover the electrical contacts.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Jacob Davis whose telephone number is (703) 305-1232. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Milano can be reached on (703) 308-2496. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

November 26, 2003

MICHAEL J. MILANO

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 3700